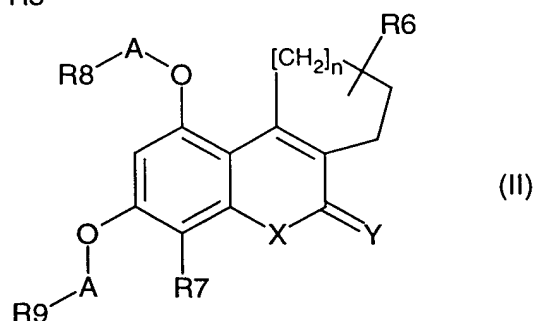
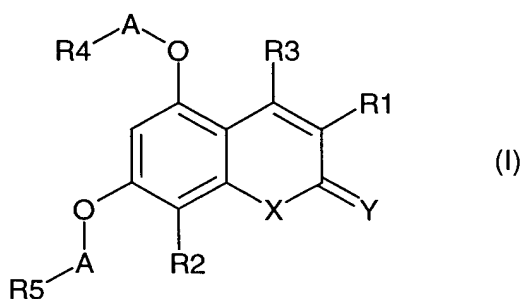


Claims

1. A method for obtaining direct dilatation of the coronary arteries
 5 comprising administering to a mammal in need thereof a therapeutically effective amount of a phospholamban inhibitor.
2. A method for the treatment of coronary heart disease comprising administering to a mammal in need thereof a therapeutically effective amount of a phospholamban inhibitor.
- 10 3. A method for the treatment of hemodynamic crisis in which the low aortic blood pressure decreases coronary perfusion pressure comprising administering to a mammal in need thereof a therapeutically effective amount of a phospholamban inhibitor.
4. Compounds of formula (I) or (II):



in which

- R₁ is hydrogen, alkyl, alkenyl, aryl, arylalkyl, hydroxyalkyl, halogenalkyl, alkoxy, COR₁₀, CONR₁₀R₁₁, OR₁₀, S(O)_mR₁₀, NR₁₀COR₁₁ or NR₁₀R₁₁, where R₁₀ is hydrogen, alkyl, alkenyl, aryl, arylalkyl, hydroxyalkyl, halogenalkyl, alkoxy or hydroxy and R₁₁ is hydrogen, alkyl, aryl, arylalkyl, alkoxy, aryloxy, hydroxy or acyl, or in case where X is NR₁₁, can R₁ also be carboxylalkyl,
- 20

R₆ is hydrogen, alkyl, alkenyl, aryl, arylalkyl,

R₂ and R₇ mean hydrogen, alkyl, aryl, arylalkyl, alkenyl, COR₁₀, CONR₁₀R₁₁, halogen, trifluoromethyl, nitro or cyano, where R₁₀ and R₁₁ are defined as above,

R₃ is hydrogen, alkyl, aryl or arylalkyl,

5 A means alkyl or substituted alkyl,

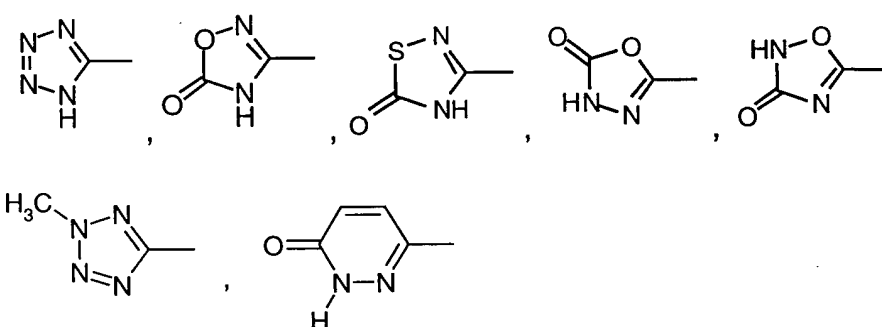
m is 0-2 and n is 1-3,

Y means O, NR₁₁ or S, where R₁₁ is the same as above,

X means O, NR₁₁ or S, where R₁₁ is the same as above,

R₄, R₅, R₈ and R₉ mean independently one of the following groups:

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or in case where X is NR₁₁, can R₄, R₅, R₈ and R₉ also independently mean HOOC-, R₁₂OOC-, H₂NCO- or HOHNCO-, wherein R₁₂ means alkyl, arylalkyl or aryl,

and wherein each aryl residue defined above by itself or as part of another group may be substituted,

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and pharmaceutically acceptable salts and esters thereof.

5. A compound of claim 4 wherein said compound has formula (I) and R₂ is hydrogen.

6. A compound of claim 5 wherein R₁ is hydrogen, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₆₋₁₀ aryl, C₇₋₁₂ arylalkyl, C₁₋₆ hydroxyalkyl, C₁₋₆ halogenalkyl or C₁₋₆ alkoxy.

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7. A compound of claim 6 wherein Y is O or S, and X is O.

8. A compound of claim 6 wherein Y is O or S; and X is NR₁₁, where R₁₁ is hydrogen, C₁₋₆ alkyl, C₆₋₁₀ aryl, C₇₋₁₂ arylalkyl, C₁₋₆ alkoxy, C₆₋₁₀ aryloxy, hydroxy, C₁₋₆ alkanoyl or C₁₋₆ carboxyalkyl.

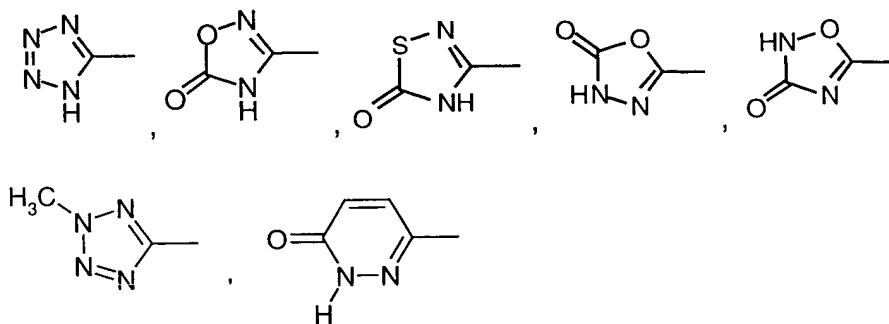
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9. A compound of claim 8, wherein R₃ is hydrogen, C₁₋₆ alkyl, C₆₋₁₀ aryl, or C₇₋₁₂ arylalkyl.

10. A compound of claim 9, wherein R₃ is C₁₋₆ alkyl.

11. A compound of claim 10, wherein A is straight-chain or branched C₁₋₄ alkylene and R₄ and R₅ are each

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; or where X is NR₁₁, then R₄ and R₅ can also be HOOC-, R₁₂OOC-, H₂NCO- or HOHNCO-, where R₁₂ is C₁₋₆ alkyl, C₆₋₁₀ aryl, or C₇₋₁₂ arylalkyl.

12. A compound of claim 4, wherein said compound has formula (II) and R₇ is hydrogen.

13. A compound of claim 12, wherein R₆ is hydrogen, C₁₋₆ alkyl, C₆₋₁₀ aryl, C₇₋₁₂ arylalkyl; and n is 1, 2 or 3.

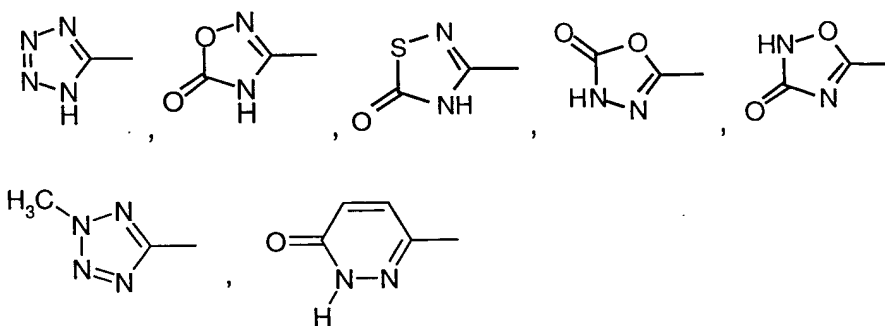
14. A compound of claim 13, wherein Y is O or S, and X is O.

15. A compound of claim 13, wherein Y is O or S; and X is NR₁₁, where R₁₁ is hydrogen, C₁₋₆ alkyl, C₆₋₁₀ aryl, C₇₋₁₂ arylalkyl, C₁₋₆ alkoxy, C₆₋₁₀ aryloxy, hydroxy, C₁₋₆ alkanoyl or C₁₋₆ carboxyalkyl.

16. A compound of claim 14, wherein A is straight-chain or branched C₁₋₄ alkylene.

17. A compound of claim 16, wherein R₄ and R₅ are each

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; or where X is NR₁₁, then R₄ and R₅ can also be HOOC-, R₁₂OOC-, H₂NCO- or HOHNCO-, where R₁₂ is C₁₋₆ alkyl, C₆₋₁₀ aryl, or C₇₋₁₂ arylalkyl.

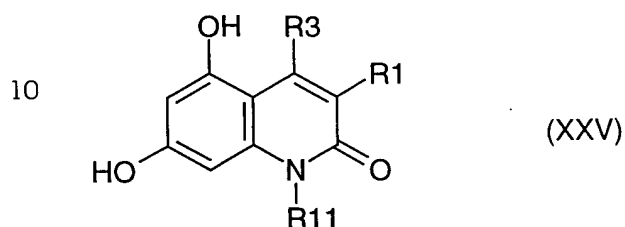
18. A pharmaceutical composition comprising a compound of claim 4 as an active ingredient together with pharmaceutically acceptable carrier.

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19. A method of treating heart failure comprising administering to a subject in need thereof a therapeutically effective amount of a compound of claim 4.

20. A method for the treatment and prevention of stunned myocardium comprising administering to a subject in need thereof a therapeutically effective amount of a compound of claim 1.

21. A compound of formula (XXV):



15 wherein R₁ is hydrogen, alkyl, alkenyl, aryl, arylalkyl, hydroxyalkyl, halogenalkyl, alkoxy, COR₁₀, CONR₁₀R₁₁, OR₁₀, S(O)_mR₁₀, NR₁₀COR₁₁ or NR₁₀R₁₁, where R₁₀ is hydrogen, alkyl, alkenyl, aryl, arylalkyl, hydroxyalkyl, halogenalkyl, alkoxy or hydroxy and R₁₁ is hydrogen, alkyl, aryl, arylalkyl, alkoxy, aryloxy, hydroxy or acyl, or carboxylalkyl,

20 R₃ is hydrogen, alkyl, aryl or arylalkyl,
 R₁₁ is hydrogen, alkyl, aryl, arylalkyl, alkoxy, aryloxy, hydroxy or acyl, or carboxylalkyl,

 and wherein each aryl residue defined above by itself or as part of another group may be substituted.